



CAUTION: Your four-by-four (4x4) vehicle, particularly when loaded, may handle differently than an ordinary passenger car. This is because your 4x4 vehicle has special design and equipment features for off-road operation.

Since your 4x4 vehicle is unique, you must pay special attention to safety.

First, avoid unnecessary sharp turns or other abrupt maneuvers that could cause loss of control, possibly leading to rollover or other accidents that could result in serious injury. For instructions on how to handle this vehicle during emergency maneuvers on the road, see pages 4 and 5.

Second, Ford recommends you use the same size and type of tire and wheel for your vehicle as originally provided. Use of "aftermarket lift kits" or other tire and wheel assemblies can adversely affect the handling of the vehicle and may make it easier to lose control and roll over in highway or off-road use, which could result in serious injury. See discussion on pages 13 and 14.

Third, be sure to familiarize yourself with this vehicle's operating characteristics. Study the Owner's Guide and this supplemental booklet for specific information and instructions for safe driving under various conditions.

Fourth, be sure all occupants wear the safety belts provided to minimize the risk of injury or ejection.

Fifth, remember — cautious, defensive driving at speeds safe for road conditions and the use of safety belts are the best means of avoiding the possibility of accident and serious injury.

INTRODUCTION

Welcome to Ford Motor Company's world of four-wheel driving! Your new four-wheel drive (4WD) vehicle opens up a completely different and challenging world of travel unlike what you have ever experienced with a conventional two-wheel drive vehicle. Now, you'll be able to travel places where roads don't. You'll be able to travel when weather conditions have made roads impassable for two-wheel drive vehicles. And most importantly, you'll be able to travel with the safety, comfort and dependability of a Ford-built vehicle.

The steering and handling characteristics of vehicles may vary, and you must learn and understand the capabilities and limitations of your 4x4 through experience. Take it slow and easy until you get to know and understand your vehicle, and have confidence in your ability to drive it.

A NOTE TO 4X2 BRONCO II OWNERS

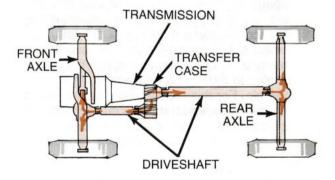
Although this supplement is primarily directed to four-wheel drive vehicle operators, these principles of safe driving also apply to operators of two-wheel drive Bronco II's. Even though you did not select a 4X4 option for your Bronco II, many of its operating characteristics are similar to those of a four-wheel drive vehicle. For this reason, Ford urges you to read and understand the contents of this supplement.

Copyright ©1987, Ford Motor Company

THE FOUR-WHEEL DRIVE SYSTEM

What exactly is four-wheel drive? When you select the 4WD mode, your light truck uses all four wheels to power itself. This increases traction, enabling you to drive over terrain and road conditions that the conventional two-wheel drive vehicle can't.

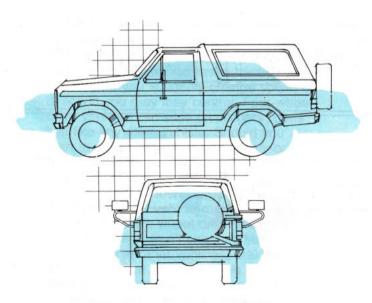
Power is supplied to all four wheels through a transfer case that allows you to select four-wheel drive when necessary. Information on transfer case operation, shifting procedures and maintenance can be found in your Owner's Guide. You should become thoroughly familiar with this information before you operate your vehicle.



How Your 4WD Differs From Other Vehicles

4WD vehicles can differ from some other vehicles in a few noticeable ways. Your 4x4 may be:

- Higher to allow it to travel over rough terrain without getting hung up or damaging underbody components, and to accommodate 4WD components.
- Shorter to give it the capability to approach inclines and drive over the crest of a hill without getting hung up or damaging underbody components. A shorter wheelbase may make your vehicle quicker to respond to steering inputs than a vehicle with a longer wheelbase.
- Narrower to provide greater maneuverability in tight spaces, particularly in off-road use, and improved fuel efficiency.



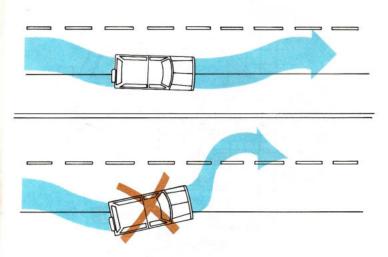
OPERATING YOUR FOUR-BY-FOUR ON THE ROAD

Basic Operating Principles:

- Do not use four-wheel drive on dry, hard-surfaced roads. This may damage the drivelines and axles.
- Drive slower in strong crosswinds which can affect the normal steering characteristics of your vehicle.
- Be extremely careful when driving on pavement made slippery by loose sand, water, gravel, snow or ice.

Emergency Maneuvers

 In an unavoidable emergency situation where a sudden sharp turn must be made, remember to avoid "over-driving" your vehicle, i.e., turn the steering wheel only as rapidly and as far as required to



Avoid sudden, sharp maneuvers.

avoid the emergency. Excessive steering inputs will result in less vehicle control — not more. Additionally, smooth variations of the accelerator and/or brake pedal should be utilized if changes in speed are called for. Avoid abrupt inputs to steering, accelerator or brakes. Use all of the available road surface to return the vehicle to a safe direction of travel.

- If your vehicle goes off the edge of the pavement, slow down, but avoid sudden brake application. Ease the vehicle back on to the road surface and do not turn the steering wheel too sharply while returning to the road surface. (See illustration on page 4.)
- In the event of an emergency brake stop, avoid skidding the tires and do not attempt any sharp steering wheel movements.

Snow/Ice

Your 4WD vehicle will have advantages over two-wheel drive vehicles in snow and on ice by providing increased traction. However, if you suddenly change speed or direction you may lose control. Four-wheel drive vehicles can slide on slippery roads just like any other vehicle. Should you start to slide while driving on snowy or icv roads, turn the steering wheel in the direction of the slide until you regain control. Avoid sudden braking as well. Although a 4WD vehicle may accelerate better than a two-wheel drive vehicle in snow and ice, it won't stop any faster, because as in other vehicles, braking action occurs at all four wheels. Do not become overconfident as to road conditions.

Make sure you allow sufficient distance between you and other vehicles for stopping. In emergency stopping situations, avoid prolonged locking of the wheels. Rapid, smooth "pumping" of the brakes will achieve the shortest possible stopping distances while helping you to maintain steering control. See your vehicle's Owner Guide for information on the operation of the rear anti-lock brake system.

Parking

Before leaving the driver's seat, you should make sure that the gear selector is engaged in P (PARK) with an automatic transmission or either 1 (FIRST) or R (REVERSE) with a manual transmission. Set the parking brake fully, shut off the ignition and remove the key.

NOTE: With the transfer case in N (NEUTRAL) neither the automatic transmission P (PARK) position nor the manual transmission in any driving gear mode will hold the vehicle stationary. Do not leave the vehicle unattended with the transfer case in N (NEUTRAL). Unexpected and possibly sudden vehicle movement may occur if these precautions are not taken.

OFF-ROAD DRIVING WITH 4WD

When using four-wheel drive, you must have full steering wheel control at all times, especially when driving over rough terrain. Since sudden changes in terrain can cause abrupt steering wheel motion, make sure you grip the steering wheel rim securely from the outside.

Drive cautiously to avoid vehicle damage from concealed objects such as rocks and stumps. Know the terrain or examine maps of the area in question before driving. When the terrain is known to be extremely rough, determine beforehand the driving route to be used. To maintain steering and braking control of your vehicle, you must have all four tires on the ground, and they must be rolling, not sliding or spinning.

Sand

When driving over sand, always try to keep all four wheels of the vehicle on the most solid area of the trail. Avoid reducing the tire pressure. Instead, shift to a lower gear and drive steadily through the soft terrain. If you must reduce tire pressure for whatever reason in sand, make sure you re-inflate the tires as soon as possible. In any case, apply the accelerator slowly and avoid spinning your wheels.



Avoid excessive speed because vehicle momentum can work against you and cause the vehicle to become stuck to the point that assistance may be required from another vehicle. Remember, you may be able to back out the way you came if you proceed with caution.

Mud

Be cautious of sudden changes in vehicle speed or direction when you are driving in mud. Even four-wheel drive vehicles can lose traction in slick mud. As when you are driving over sand, apply the accelerator slowly and avoid spinning your wheels. If the vehicle does slide, steer in the direction of the slide until you gain control of the vehicle. After driving through deep mud, clean off residue stuck to rotating driveshafts and tires. Excess mud stuck on tires and rotating driveshafts causes an imbalance, which could damage vehicle components.

Water

Before you drive through water, determine the depth. Avoid water deep enough to completely submerge the wheel hubs. Proceed slowly to avoid splashing — if the ignition system gets wet, the vehicle could stall. Once you are through the water, be sure to test the brakes. Wet brakes do not stop the vehicle as effectively as dry brakes. You can dry the brakes faster by driving the vehicle slowly with light pressure on the brake pedal.

Deep Snow

Four-wheel drive vehicles are unique in that they can be driven in deep snow that would stop a conventional two-wheel drive vehicle. Shift to a low gear and maintain steady pressure on the accelerator. This will help you avoid spinning the wheels while maintaining sufficient momentum to keep from bogging down. Using tire chains will also help.



Never drive with chains on the front tires of 4WD vehicles without also putting them on the rear tires. This could cause the rear end to slide and swing around during braking.

Driving On Hills

Although natural obstacles may make it necessary to travel diagonally up or down a hill or steep incline, you should always try to drive straight up or straight down.

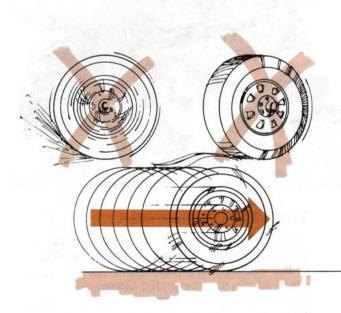
Avoid driving crosswise or turning on steep slopes or hills. A danger lies in losing traction, slipping sideways and possibly rolling over. Whenever driving on a hill, determine beforehand the route you will use. Do not drive over the crest of a hill without seeing what conditions are on the other side. Do not drive in reverse over a hill without the aid of an observer.



When climbing a slope or hill, start out in a low gear. You should not begin in a high gear and then shift to a lower gear after the ascent is started, because starting in a lower gear will result in less strain on the engine and minimize the possibility of stalling.

NOTE: If you do stall out, DON'T try to turn around because you might roll over. It is better to back down to a safe location.

Apply just enough power to the wheels to climb the hill. Too much power will cause the tires to slip, spin and lose traction, resulting in loss of vehicle control.



Keep tires from spinning or slipping to help maintain vehicle control.

Descend a hill in the same gear you would use to go up the hill to avoid excessive brake application and brake overheating. Do not descend in neutral — it is better to use the engine braking force to help control the vehicle. When descending a steep hill, avoid braking suddenly as you could lose control. When you brake suddenly, the front wheels can't turn, and if they aren't turning, you won't be able to steer. The front wheels have to be turning in order to steer the vehicle. Rapid pumping of the brake pedal will help you to slow the vehicle and still maintain steering control.



TRAILER TOWING

Your 4WD vehicle is equipped for towing trailers, provided that the combined weight of the vehicle and trailer is less than or equal to the recommended Gross Combination Weight Rating (GCWR). Refer to the Ford Recreation Vehicle and Trailer Towing Guide, the Owner's Guide, or see your Ford dealer for additional information.



TIRES

Your 4WD vehicle is equipped with tires that are designed to make your ride as safe as possible.

Do not use tires and wheels other than those recommended by Ford because they can affect the safety and performance of your vehicle. Make sure all tires and wheels on the vehicle are of the same size, type and load-carrying capacity. If you nevertheless decide to equip your 4x4 for off-road use with tires larger than what Ford recommends, you should not use these tires for highway driving.

If you use any tire/wheel combination not recommended by Ford, it may adversely affect vehicle handling and could cause steering, suspension, or axle failure. Ford also advises against the use of "aftermarket lift kits" or other suspension modifications, whether or not they are used with larger tires and wheels. "Aftermarket lift kits" could adversely affect the vehicle's handling characteristics, which could lead to loss of vehicle control or rollover.

Tires can be damaged during off-road use. For your safety, tires that are damaged should not be used for highway driving because they are more likely to blow out or fail.

Before you drive each day, check your tires. If one looks lower than the others, use a tire gauge to check pressure of all tires, and adjust if required. Check tire pressure with a tire gauge every few weeks (including the spare). Safe operation requires tires that are neither under-inflated nor overloaded. Check the Vehicle Certification Label on the door pillar for the correct inflation pressures on original equipment tires.

Periodically, inspect the tire treads and remove stones, nails, glass or other objects that may be wedged in the tread grooves. Check for holes or cuts that may permit air leakage from the tire, and make necessary repairs.

Inspect the tire side walls for cuts, bruises and other damage. If internal damage to the tire is suspected, have the tire demounted and inspected in case it needs to be repaired or replaced.

MAINTENANCE AND MODIFICATIONS

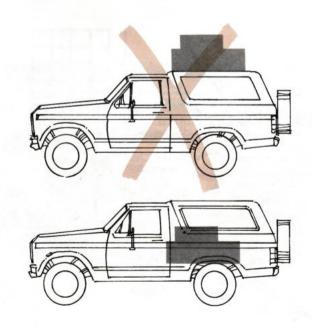
The suspension and steering systems on your vehicle have been designed and tested to provide both reasonably safe, predictable performance whether loaded or empty, and durable load carrying capability. For this reason, Ford strongly recommends that you do not make modifications such as adding or removing parts (such as lift kits or stabilizer bars) or by using replacement parts not equivalent to the original factory equipment.

Any modifications to a vehicle that raise the center of gravity can make it more likely the vehicle will roll over as a result of a loss of control. Ford recommends that caution be used with any vehicle equipped with a high load or device (such as ladder racks or pickup box cover) and that they not be used on the High Rider 4x4 Rangers.

Failure to maintain your vehicle properly may void the warranty, increase your repair cost, reduce vehicle performance and operational capabilities, and adversely affect driver and passenger safety. Frequent inspection of vehicle chassis components is recommended if the vehicle is subjected to heavy off-road usage. Refer to the Owner's Guide for proper maintenance instructions and schedules.

HAULING CARGO AND VEHICLE HANDLING

When using your vehicle to haul cargo, make sure it's properly loaded to help ensure safe handling. Cargo should be evenly distributed over the floor of the cargo area, with the heaviest cargo on the bottom and ahead of the rear axles. If you must haul cargo on the roof of the vehicle, use extra caution when driving. Considerable



cargo placed on the roof will make your vehicle top heavy, causing it to lean more on corners and creating a greater possibility of vehicle rollover should you lose control of the vehicle.

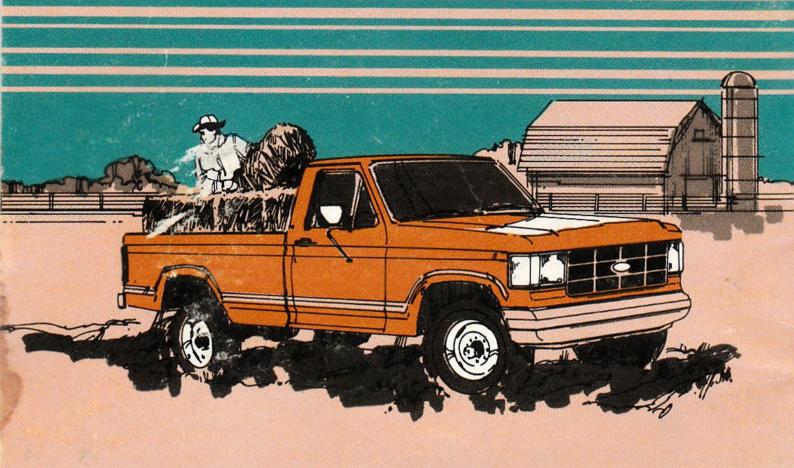
Loading the vehicle improperly can deteriorate handling capability and contribute to loss of vehicle control.

Once you have reached the weight capacity of the vehicle, do not add more cargo, even if there is space available. Make sure you consult the Safety Compliance Certification Label attached to your vehicle and the Owner's Guide for information about maximum safe vehicle weight limits.

NOTE: Ford Motor Company reserves the right at any time to change information provided herein, including specifications, design or testing procedures without notice and without incurring obligation.



INDEX





WE SUPPORT VOLUNTARY TECHNICIAN CERTIFICATION



Ford Parts and Service Division Training and Publications Department

' FPS-12025-88A

Litho in U.S.A.

First Printing August, 1987